METHOD FOR MEASURING DIMENSIONS OF MINUTE STRUCTURES AND APPARATUS FOR PERFORMING THE SAME

ABSTRACT OF THE DISCLOSURE

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A method for measuring dimensions of minute structures on a substrate include irradiating primary electrons onto the minute structures, and detecting secondary electrons generated from the minute structures. Image data of the minute structures is formed, and at least two measuring regions are determined over the minute structures using the image data. The dimensions of the minute structures corresponding to the measuring regions are calculated. The primary electrons are provided from an electron emission member to the minute structures, and the secondary electrons are converted into current signals and then imaged in a displaying member. An operation member calculates the dimensions of the minute structures corresponding to the measuring regions using the image data of the minute structures stored in a storage member and measurement data that is measured at the measuring regions.